

REMARKS

Claims 1, 3, 5-12, 14-24, 26-41, 50-57, 74-82 and 102-116 are currently pending. Claims 2-4, 12, 13, 24, 25, 33, 34, and 39-101 have been canceled, without prejudice, for Applicants to pursue in separate application. Thus, claims 1, 5-11, 14-23, 26-32, 35-38, and 102-116 are currently under consideration. Claims 1, 5, 10, 23, 26-32, 35, 36, 102, 107, 111, and 112 have been amended but are still within the scope that has been searched by the Examiner so no new search is required.

Applicants would like to thank the Examiner for withdrawal of the 35 U.S.C. §112, second paragraph rejections of claims 1-38 and 102-116; withdrawal of the 35 U.S.C. §102(e) rejection of claims 1-6, 9-15, 18-27 and 30-38 in view of Ge, *et al.*; withdrawal of the 35 U.S.C. §102(e) rejection of claims 1-38 and 102-116 in view of Kahne, WO 00/42067; withdrawal of the 35 U.S.C. §102(a, b) rejection of claims 1, 102 and 103 in view of Stack *et al.*, EP 0802199A2; and withdrawal of the 35 U.S.C. §102(e) rejection of claims 1, 102, and 103 in view of Cooper *et al.*, U.S. Patent No. 5,843,889.

Maintained Rejections

I. Claims 102 and 107 stand rejected due to the term “substituted amino group”. While Applicants disagree with the contention that the term “substituted amino group” lacks metes and bounds, Applicants have amended claims 102 and 107 to further clarify the invention. In so doing, the phrase objected to by the Examiner has been removed. Claims 102 and 107 now recite an “amino group.” Persons of skill in the art will appreciate the breadth of this element in the context of the present invention and in particular that naturally occurring amino groups, and modified or substituted amino are each a kind of “amino group.” Reconsideration and withdrawal of these rejections is requested.

II. Claims 1-38 and 102-116 stand rejected for allegedly being non-enabled. Applicants respectfully traverse this rejection. At the outset, Applicants note that many of the indefiniteness rejections that formed the basis for the enablement rejection in the previous office action (dated March 28, 2005), and which have been repeated in the current Office Action, have been withdrawn by the Examiner. (*See* Office Action at 3). Specifically, the Examiner has acknowledged that:

a) the rejection of the claims as lacking metes and bounds for the term “modified alpha amino acid residue” is withdrawn;

b) the rejection of term “modified disaccharide” as being indefinite is withdrawn;

c) the rejection of omitting structural features is withdrawn;

d) the rejections of the claims as lacking metes and bounds due to the term “glycosidic groups” and “sugar residues” has been withdrawn; and

e) the rejection of the term “modified to bear at least one substituent which is not hydroxyl” has been withdrawn.

(See Office Action at 3).

Whenever the adequacy of enablement provided by an Applicant’s specification is challenged, the Examiner has the initial burden of giving reasons, supported by the record as a whole, why the specification is not enabling. The enablement requirement is satisfied if a disclosure contains sufficient information such that persons of ordinary skill in the art, having the disclosure before them, would be able to make and use the invention. The legal standard for enablement under §112 is whether one skilled in the art would be able to practice the invention without undue experimentation. *In re Wands*, 8 U.S.P.Q.2d 1400 (Fed. Cir. 1988). Applicants respectfully assert that a close inspection of the *Wands* factors does not support rejection of the present claims but, in fact, indicates that any experimentation associated with practice of the claimed methods would be routine in nature and well within the level of skill in the art.

Breath of the claims

Applicants traverse the Office Action’s contention that the breath of claims supports a determination of undue experimentation under the *Wands* factors. (See Office Action at 7). The Office Action states that the breath of the claims is huge in light of the failure to specifically claim the linkage and position between the peptide and glycoside portions of the glycopeptide, as well as the failure to specifically claim the metes and bounds regarding the chemical nature of the peptide and glycosidic portions as well as substituents therefrom. The Office Action then reiterates the indefiniteness rejections as support for lack of enablement.

As stated in c) above, the Examiner has acknowledged that the claims as amended are not indefinite in describing the linkage and position between the peptide and glycoside portions of the glycopeptide. Applicants have also defined the metes and bounds of the

chemical nature of the peptide (“*A glycopeptide of the formula $A_1-A_2-A_3-A_4-A_5-A_6-A_7$, [SEQ ID NO:1] in which each dash represents a covalent bond; wherein the group A_1 comprises an α -amino acid residue, alkyl, aryl, aralkyl, alkanoyl, aroyl, aralkanoyl, heterocyclic, heterocyclic-carbonyl, heterocyclic-alkyl, heterocyclic-alkyl-carbonyl, alkylsulfonyl, arylsulfonyl, guanidiny, carbamoyl, or xanthyl; where each of the groups A_2 to A_7 comprises an α -amino acid residue, whereby (i) the group A_1 is linked to an amino group on the group A_2 , (ii) each of the groups A_2 , A_4 and A_6 bears an aromatic side chain, which aromatic side chains are cross-linked together by two or more covalent bonds, and (iii) the group A_7 bears a terminal carboxyl, ester, amide, or *N*-substituted amide group...*”), as well as the chemical nature of the glycosidic portions and its substituents (“wherein the group A_4 is linked via a glycosidic bond to a disaccharide having a glucose residue directly attached to said A_4 residue, wherein said glucose residue bears an *N*-substituted aminohexose residue and at least one substituent of the formula YXR , $N^+(R_1)=CR_2R_3$, $N=PR_1R_2R_3$, $N^+R_1R_2R_3$ or $P^+R_1R_2R_3$ attached to the C-6 position of said glucose...”)(emphasis added). In addition, the specification fully supports the teachings of the claims, for example, at pages 8, 9 and 18, as well as in the 101 examples spanning pages 29 through 128 of the specification. The very large number of actual, working examples presented in the application is illustrative of the breadth of the invention and are supportive of its enablement. The invention is broad by nature and must be seen to be so. Whatever experimentation may be required is greatly abbreviated by the extensive teachings of the specification. Experimentation is not undue so long as it is of a routine nature. *Ex parte Forman*, 230 U.S.P.Q. 546, 547 (Pat. Off. Bd. App. 1986).

Nature of the invention and level of ordinary skill in the art

The present invention is directed to glycopeptide antibiotics. As acknowledged by the Examiner at page 9, the level of one of ordinary skill in the art is masters or PhD. level.

The level of predictability in the art and quantity of experimentation

Applicants respectfully assert that they have provided an enabling disclosure of the claimed methods in view of the knowledge in the art. Glycopeptide antibiotics are disclosed in the present specification at pages 12-23 and throughout the numerous examples contained in the specification at pages 29-128. The Office Action asserts, however, that the making and potential usefulness of “glycopeptide” compounds of different chemical structure is not a

priori predictable. (See Office Action at 9). Applicants have demonstrated, however, how to make the presently claimed glycopeptide antibiotics of the amended claims, which are evidenced by, among other things, the large number of working examples directed to the synthesis of compounds of the invention. Further synthesis of compounds of the invention would be a matter of routine experimentation for one skilled in the art armed with Applicants' disclosure.

The amount of direction/working examples

The Examiner acknowledges that the specification provides guidance and examples directed to the making and use of vancomycin glucose C-6 substituted derivatives. (See Office Action at 9). As amended, claims 1 and 102 are fully supported and taught by the numerous working examples demonstrating the making and use of vancomycin glucose C-6 substituted derivatives.

The Office Action further asserts that the metes and bounds of the number of substituents and the position of the substituents is not clear. (See Office Action at 10). Applicants disagree. As amended, the claims clearly define the position of the substituent on the glucose residue (claim 1, C-6 position) or on the second saccharide residue (claim 102, C-6 position). Chemical modification of sugar residues is well-known to those skilled in the art such that a skilled artisan through routine experimentation will be able to determine how many substituents are feasibly possible at the C-6 position. The present invention is not intended to encompass chemically unstable glycopeptide antibiotics. Thus, contrary to the Office Action's assertion, the amended claim breath is not indefinite.

Applicants assert that those skilled in the art, having read Applicants' specification would be able to practice the claimed inventions with no more than routine experimentation. Applicants respectfully request that the rejection of claims 1, 5-11, 14-23, 26-32, 35-38, and 102-116 under 35 U.S.C. § 112, first paragraph be withdrawn.

III. Claims 1-38 and 102-116 stand rejected for allegedly lacking written description. Applicants respectfully traverse this rejection. Again, Applicants note that many of the indefiniteness rejections that formed the basis for the written description rejection in the previous office action (dated March 28, 2005), and which have been repeated in the current Office Action, have been withdrawn by the Examiner (See Office Action, page 3). Specifically, the Examiner has acknowledged that:

- a) the rejection of the claims as lacking metes and bounds for the term “modified alpha amino acid residue” is withdrawn;
- b) the rejection of term “modified disaccharide” as being indefinite is withdrawn;
- c) the rejection of omitting structural features is withdrawn;
- d) the rejections of the claims as lacking metes and bounds due to the term “glycosidic groups” and “sugar residues” has been withdrawn; and
- e) the rejection of the term “modified to bear at least one substituent which is not hydroxyl” has been withdrawn.

The Office Action states that the breath of the claims is huge in light of the failure to specifically claim the linkage and position between the peptide and glycoside portions of the glycopeptide, as well as the failure to specifically claim the metes and bounds regarding the chemical nature of the peptide and glycosidic portions as well as substituents therefrom. (*See* Office Action at 11-12). The Office Action then reiterates the indefiniteness rejections as support for lack of written description.

As stated in c) above, the Examiner has acknowledged that the claims as amended are not indefinite in describing the linkage and position between the peptide and glycoside portions of the glycopeptide. Applicants have also specifically claimed the metes and bounds of the chemical nature of the peptide (“*A glycopeptide of the formula $A_1-A_2-A_3-A_4-A_5-A_6-A_7$, [SEQ ID NO:1] in which each dash represents a covalent bond; wherein the group A_1 comprises an α -amino acid residue, alkyl, aryl, aralkyl, alkanoyl, aroyl, aralkanoyl, heterocyclic, heterocyclic-carbonyl, heterocyclic-alkyl, heterocyclic-alkyl-carbonyl, alkylsulfonyl, arylsulfonyl, guanidiny, carbamoyl, or xanthyl; where each of the groups A_2 to A_7 comprises an α -amino acid residue, whereby (i) the group A_1 is linked to an amino group on the group A_2 , (ii) each of the groups A_2 , A_4 and A_6 bears an aromatic side chain, which aromatic side chains are cross-linked together by two or more covalent bonds, and (iii) the group A_7 bears a terminal carboxyl, ester, amide, or N-substituted amide group*”), as well as the chemical nature of the glycosidic portions and its substituents (“wherein the group A_4 is linked via a glycosidic bond to a disaccharide having a glucose residue directly attached to said A_4 residue, wherein said glucose residue bears an N-substituted aminohexose residue and at least one substituent of the formula YXR , $N^+(R_1)=CR_2R_3$, $N=PR_1R_2R_3$, $N^+R_1R_2R_3$ or $P^+R_1R_2R_3$ is attached to the C-6 position of said glucose...”)(emphasis added). In addition,

the specification fully supports the teachings of the claims, for examples, at pages 8, 9 and 18, as well as in the 101 examples spanning pages 29 through 128. The very large number of actual, working examples presented in the application is illustrative of the breadth of the invention and are supportive of adequate written description and that the Applicants were in possession of the invention at the time of filing, which is the standard by which adequate written description is judged.

A. The Examiner has alleged that in claim 1 (and in dependent claims therefrom), the term “modified alpha amino acid residue” lacks metes and bounds as to the modifications and resulting structure encompassed by the claimed invention.

In order to more clearly define the invention, Applicant's have amended claim 1 to recite “... an α -amino acid residue”, which encompasses both modified and unmodified (*i.e.* naturally occurring) amino acid residues. Modified amino acid residues are described throughout Applicants' specification, for example, at page 17, lines 12-24, and are described as including amino acid residues containing aromatic groups which have been substituted, and amino acid residues containing protecting groups. One skilled in the art will be readily familiar with the subject matter of amino acid chemistry, as well as the modification of amino acids. The requirement for adequate written description has been met by Applicants' specification, for a skilled artisan will appreciate what an amino acid residue is, and in view of Applicants' specification, the modified amino acid residues contemplated by the present invention. The teachings of the specification furthermore illustrate that Applicants were in possession of the claimed invention at the time of filing.

B. Claim 1 is alleged to be indefinite because the phrase “modified amino acid residue” is discussed in the specification as including “groups easily introduced.” With respect, it is believed that this is an inappropriate basis for rejection of the claim. The roles of the specification of a patent application include teaching those skilled in the art how to make and use the invention, to provide enablement, and to serve other functions. Here, persons skilled in vancomycin chemistry will readily understand that amino acids bearing substituents, especially those which are commonplace or “easily introduced” can be employed in the practice of the invention. Such persons will have not difficulty selecting appropriate substituents and, indeed, the ability to make broad choices in this regard is an advantage of the invention. The language focused upon was not included in the language of

the claims and cannot now be read into the claim. The question is not whether the language is sufficiently exact as to be appropriate as a claim limitation, but whether the claim, itself, is clear and definite and whether skilled workers in the field will understand what is meant. There is no question but that these requirements are met. In any event, as discussed above, Applicants have amended claim 1 to recite "an α -amino acid residue" to more clearly define their invention, thus rendering the Examiner's rejection moot. The specification describes α -amino acid residues as part of the invention, at for example, pages 8, 16 and 17.

C. Claims 1, 2, 102 and 103 (and dependent claims therefrom) are alleged to be indefinite for the recitation of the term "disaccharide modified to bear" with regard to "what chemical portion of the saccharide is being modified and . . . which sugar residue(s) are being modified." (See Office Action at 12). Claims 1 and 102 have been amended to more clearly define Applicants' invention. In claim 1, it will be clear to one of skill in the art the glucose residue linked directly to the group A₄ is the glucose group being modified. Claim 2 has been canceled, thereby rendering the rejection of it moot. In claims 102 and 103, which refer to a first and second saccharide group, as amended, it is clear that the second saccharide group directly attached to the glycopeptide is the saccharide group being modified. Moreover, the specification contains a teaching of the manner and process of making and using the invention in terms which correspond in scope to those used in describing and defining the claimed subject matter sought. For example, the specification at page 18 describes that the glucose residue linked directly to the group A₄ is the glucose group being modified ("In one preferred embodiment of the invention, a hexose residue is bonded directly to A₄ and is substituted by a group XYR. . . . The hexose residue may be a monosaccharide residue or part of a disaccharide or oligosaccharide residue.") A glucose residue is clearly described by the provided definition of a "hexose residue". As such, the specification demonstrates with reasonable clarity that Applicants were in possession of the invention at the time of filing, thereby complying with the written description requirements of the first paragraph of 35 U.S.C. §112.

D. Claim 1 is alleged to be incomplete for the omission of essential structural cooperative relationships of elements recited therein. The Office Action alleges, at page 12, that the unclaimed essential matter is the location of "the 'glycosidic bond' . . . formed between the peptide and glycosyl group(s) to form the glycopeptide." Claim 1 recites

that "...the group A₄ is linked via a glycosidic bond to a disaccharide." This is taught in the specification at, for example, page 16 ("it is further required that one or more of the groups A₁ to A₇ is linked via a glycosidic bond to one or more glycosidic groups..."). The specification describes a preferred embodiment, wherein the glycopeptide composition is derived from vancomycin, a well know antibiotic in the field of glycopeptide antibiotics. *See* Specification at 18. A skilled artisan in the field of glycopeptide chemistry will readily appreciate where and how glycosidic linkages can be formed between the group A₄ of the peptide and the disaccharide.

E. Claim 1 (and dependent claims therefrom) is alleged to be indefinite with regards to the upper limit of how many glycosidic groups may be linked to one or more of the groups A₁ through A₇, how many sugar residues a glycosidic group may contain, and what that structure would be. Claim 1 has been amended to more clearly define Applicants' invention and provides that the group A₄ is linked via a glycosidic bond to a disaccharide having a glucose residue directly attached to the A₄ residue. This is taught throughout Applicants' specification, for example at pages 8, 9 and 18, illustrating that Applicants were in possession of the invention at the time of filing. The allegation of indefiniteness is mooted by Applicants' amendment.

F. Claims 102 and 107 are said to be indefinite, as lacking metes and bounds to the encompassed substituents and ultimate structure of a "substituted amino group." Many examples of such substituents are disclosed throughout the specification, *e.g.* at pages 17, lines 12-24 and throughout the examples, and the applicability of this invention to a variety of substitutions is one of the advantages of the invention. One of skill in the art would clearly understand meaning of a "substituted amino group" in the context of the claimed invention. As discussed above, while Applicants disagree with the contention that the term "substituted amino group" lacks metes and bounds, Applicants have amended claims 102 and 107 to further clarify the invention. In so doing, the phrase objected to by the Examiner has been removed. Claims 102 and 107 now recite an "amino group." Persons of skill in the art will appreciate the breadth of this element in the context of the present invention and in particular that naturally occurring amino groups, and modified or substituted amino are each a kind of "amino group." Moreover, amino acids and substituted amino acids

in the context of the invention are taught with sufficient clarity to illustrate possession of the invention.

G. Claim 102 is said to be indefinite for the recitation of the phrase “modified to bear at least one substituent which is not hydroxyl” with respect to the encompassed substituents. In order to fully define Applicants’ invention, claim 102 has been amended to recite “[a] glycopeptide antibiotic bearing at least one disaccharide group, said disaccharide group comprising two saccharide groups, a first of said saccharide groups bearing at least one amino group, and a second of said saccharide groups linked directly to said glycopeptide bears at least one substituent of the formula YXR , $N^+(R_1)=CR_2R_3$, $N=PR_1R_2R_3$, $N^+R_1R_2R_3$ or $P^+R_1R_2R_3$ at the C-6 position of said saccharide...”. With reference to the specification at pages 16-18, one skilled in the art will recognize that Applicants’ specification contains an explicit teaching of the manner and process of making and using the claimed invention.

Furthermore, the Office Action asserts, however, that the making and potential usefulness of “glycopeptide” compounds of different chemical structure is not *a priori* predictable. (See Office Action at 13). Applicants have demonstrated, however, how to make the presently claimed glycopeptide antibiotics, which are evidenced by, among other things, the large number of working examples directed to the synthesis of compounds of the invention and the Examiner’s own recognition that “the specification provides guidance and examples directed to the making and use (e.g. antibiotics) of vancomycin C6 substituted derivatives...”. (See Office Action at 13). The claims as amended clearly define the nature and placement of sugar residues on the glycopeptide antibiotics, as well as the nature and placement of substituents on those sugar residues. Claim 1 as amended clarifies that the substituent on the glucose residue is present at the C-6 position of the glucose residue, and in claim 102, the substituent is present at the C-6 position of the second saccharide residue. Chemical modification of sugar residues is well-known to those skilled in the art such that a skilled artisan through no more than routine experimentation will be able to determine how many substituents are feasibly possible at the C-6 position. Applicants are not obligated to describe those processes that are well-known in the art. The present invention is not intended to encompass chemically unstable glycopeptide antibiotics, and Applicants have provided reasonable clarity for making and using the claimed invention.

The reasoning and evidence offered in the Office Action is insufficient to support the conclusion that the claimed invention lacks adequate written description. Applicants submit that it would be apparent to one of ordinary skill in the art that Applicants were in possession of the claimed invention at the time of filing, thereby fulfilling the requirements of the first paragraph of 35 U.S.C. §112. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 1, 5-11, 14-23, 26-32, 35-38, and 102-116 under 35 U.S.C. §112, first paragraph.

IV. Claims 1-38 and 102-116 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-47 of U.S. Patent No. 6,498,238, over claims 1-19 of U.S. Patent No. 6,841,661, and over claims 1-20 of U.S. Patent No. 6,710,168. Filed concurrently with this amendment are Applicants' Terminal Disclaimers, pursuant to 37 C.F.R. 1.321(c), to commonly owned U.S. Patent Nos. 6,498,238, 6,841,661, and 6,710,168, thereby obviating this rejection.

New Rejections

V. Claims 1, 3-38 and 102-116 are rejected under 35 U.S.C. §112, second paragraph as allegedly being indefinite. According to the Examiner, the limitation "the substituents of formula YXR" in claim 1 lacks sufficient antecedent basis. Claim 1 (and claims dependent therefrom) has been amended to further clarify the invention. In claim 1, the limitation in question has been amended to recite "at least one the substituent..." which has direct antecedent basis within claim 1.

VI. Claims 1 and 102 are also rejected as allegedly being vague and indefinite by reciting "at least one of the substituent" and "two or more of substituents". According to the Examiner, it is not clear how many substituents are present, what the position of the substituent is, and what the formula of the substituent is. As amended, and as described above, Applicants submit that the limitations in question are clear and definite. The "at least one of the substituent" refers to the limitation as first introduced in claim 1 or 102 that states "at least one substituent of the formula YXR, $N^+(R_1)=CR_2R_3$, $N=PR_1R_2R_3$, $N^+R_1R_2R_3$ or $P^+R_1R_2R_3$ ". It is also clear for claims 1 and 102 that the substituent is positioned on the glucose residue of claim 1 ("wherein said glucose residue bears an N-substituted aminohexose residue *and* at least one substituent of the formula YXR, $N^+(R_1)=CR_2R_3$,

$N=PR_1R_2R_3$, $N^+R_1R_2R_3$ or $P^+R_1R_2R_3$ attached to the C-6 position of said glucose”) or on the second saccharide group of claim 102 (“and a second of said saccharide groups linked directly to said glycopeptide is modified to bear at least one substituent of the formula YXR , $N^+(R_1)=CR_2R_3$, $N=PR_1R_2R_3$, $N^+R_1R_2R_3$ or $P^+R_1R_2R_3$ at the C-6 position of said saccharide”) (emphasis added).

It is further clear from each claim what the formula of the substituent is, as the claims recite “at least one substituent of the formula YXR , $N^+(R_1)=CR_2R_3$, $N=PR_1R_2R_3$, $N^+R_1R_2R_3$ or $P^+R_1R_2R_3$, in which the group Y is a single bond, O, NR_1 or S; the group X is O, NR_1 , S, SO_2 , $C(O)O$, $C(O)S$, $C(S)O$, $C(S)S$, $C(NR_1)O$, $C(O)NR_1$, or halo (in which case Y and R are absent); and R, R_1 , R_2 , and R_3 are independently hydrogen, alkyl, aryl, aralkyl, alkanoyl, aroyl, aralkanoyl, heterocyclic, heterocyclic-carbonyl, heterocyclic-alkyl, heterocyclic-alkyl-carbonyl, alkylsulfonyl or arylsulfonyl”. Each of the variables of the formulas YXR , $N^+(R_1)=CR_2R_3$, $N=PR_1R_2R_3$, $N^+R_1R_2R_3$ or $P^+R_1R_2R_3$ are defined in the claims and in Applicants’ specification, for example, at page 16. Furthermore, the claims are as definite as is practical. The claims encompass, *inter alia*, a glucose residue substituted with at least one substituent as described above, or a saccharide substituted with at least one substituent as described above, each at the C-6 position. One skilled in the art will appreciate that the claims are intended to encompass active glycopeptides and not to encompass compounds with unstable chemistries such that the number of possible substituents is limited by known chemical syntheses. The invention is described with sufficient clarity that one skilled in the art, in connection with Applicants’ specification and large number of working examples, can readily ascertain how to choose among the possible variables to obtain the desired glycopeptides. Reconsideration and withdrawal of this rejection is requested.

VII. Claim 102 is rejected for the recitation of the term “the substituents of the formula XYR ” as lacking adequate antecedent basis. Claim 102 has been amended to read “the substituent of the formula XYR ” which has direct antecedent basis within claim 102. Reconsideration and withdrawal of this rejection is requested.

VIII. Claim 1 and dependent claims therefrom, are rejected under 35 U.S.C. §112, first paragraph for lack of written description. According to the Examiner, as amended, claim 1 is different in scope than the original claims. Applicants traverse this rejection.

The Examiner contends that the scope of amended claim 1 is different in scope as compared to the original claims. (*See* Office Action, pg. 6). Comparison of the scope of claims as amended and as filed is not however the proper inquiry for determining if the claims contain new matter. It is the specification, to which the claims are apart, that must be consulted in determining the scope of the disclosure.

Claim 1 recites, *inter alia*, “wherein the group A₄ is linked via a glycosidic bond to a disaccharide having a glucose residue directly attached to said A₄ residue, wherein said glucose residue bears an N-substituted aminohexose residue and at least one substituent of the formula... attached to the C-6 position of said glucose...”. Support for this claim limitation can be found throughout the specification as filed, for example at pages 8, 9, and 18. For example, at page 8, lines 29-30, the specification teaches that “one or more of the groups A₁ to A₇ is linked via a glycosidic bond to one or more glycosidic groups each having one or more sugar residues”. At page 9, lines 13-16, the specification describes an embodiment of the invention in which “when A₄ is linked to a disaccharide in which a glucose residue bears an N-substituted aminohexose residue, then said glucose bears at least one group YXR which is not alkanoyloxy”. At page 18, lines 1-4, the specification further teaches that “[t]he glycopeptides of this invention contain at least one glycosidic group attached through a glycosidic bond to the residues A₁ to A₇. Preferably, a glycosidic group is attached to residue A₄. In one preferred embodiment of the invention, a hexose residue is bonded directly to A₄ and is substituted by a group YXR.” Page 18 further teaches, at lines 10-11, that “more preferably, the group YXR is located at the C-6 position of the hexose.” When read as a whole, the specification teaches an embodiment of the invention in which the group A₄ is linked via a glycosidic bond to a disaccharide, the disaccharide can contain a glucose residue that bears an N-substituted aminohexose residue and can be further substituted with substituents at the C-6 position of the glucose residue. It is also clear from the specification that the invention comprises those glycopeptides in which a sugar residue (glucose or, generically, hexose) is attached directly to the A₄ residue. Furthermore, and as recognized the Examiner, the numerous examples support the embodiments now claimed.

At least this evidence provides support for the scope of claim 1 as amended.
Reconsideration and withdrawal of this rejection is requested.

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PATENT
REPLY FILED UNDER EXPEDITED
PROCEDURE PURSUANT TO
37 CFR § 1.116

Conclusion

Applicants submit that claims 1, 5-11, 14-23, 26-32, 35-38, and 102-116 are in condition for allowance. If the Examiner disagrees, he is invited to telephone the undersigned.

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